

What is claimed:

1. An surgical device for attaching a retainer to a suture for securing tissue in a patient's body, comprising:
 - a first member including a first compression element;
 - a second member including a second compression element, the second member being in movable relation with the first member from a first position to a second position, wherein the first compression element and the second compression element are configured to receive the retainer there between;
 - a suture tensioner positioned on the second member and configured to receive the suture, maintaining a substantially constant tension on the suture during attachment of the retainer thereto; and
 - an energy source operably connected to the first compression element for transmitting an energy to the retainer for attachment to the suture.
2. The surgical device according to claim 1, the second member comprising a tubular section including a proximal end and a distal end, the distal end having a gapped portion with the second compression element being integrated into the gapped portion.
3. The surgical device according to claim 2, wherein the first member is positioned through the tubular section, such that the first compression element is in opposing relation to the second compression element.
4. The surgical device according to claim 3, wherein the second compression element is configured to receive a first portion of the retainer, preventing movement of the first portion of the retainer in the surgical device.

5. The surgical device according to claim 4, wherein the first compressive element is configured to capture a second portion of the retainer, such that the second portion of the retainer is separated from the first portion of the retainer when the second member is moved from the first position to the second position.

6. The surgical device according to claim 2, the second member further comprising an actuation member operably connected to the proximal end of the tubular section, wherein the actuation member operates to move the tubular section from the first position to the second position.

7. The surgical device according to claim 6, wherein the actuation member includes a bias member biasing the tubular section into the first position.

8. The surgical device according to claim 7, wherein the bias member imparts a compressive force of between about 1 lb. and 20 lbs. on the retainer interposed between the first and second compression elements.

9. The surgical device according to claim 1, wherein the suture tensioner comprises a bias member.

10. The surgical device according to claim 9, wherein the bias member imparts a tension of between about 2 lbs. to 10lbs. on the suture.

11. The surgical device according to claim 1, wherein the second member is removable attachable to the first member.

12. The surgical device according to claim 1, wherein the energy source is an external energy source.

13. The surgical device according to claim 1, wherein the energy source is an internal energy source disposed within a handle portion of the first member.

14. The surgical device according to claim 13, wherein the internal energy source is a rechargeable battery.

15. The surgical device according to claim 1, herein the energy provided by the energy source is selected from the group consisting of radio frequency (RF) energy, laser energy, microwave energy, ultrasound energy, contact heating energy, and combinations thereof.

16. The surgical device according to claim 15, wherein the first member is configured to transmit at least two different types of energy from the energy source to the first compressive element.

17. An surgical device for attaching a retainer to a suture for securing tissue in a patient's body, comprising:

a handle assembly;

a controller assembly operatively connected to the handle assembly and configured to receive a suture retainer therein, wherein a portion of the controller assembly is movable from a first position to a second position relative to a portion of the handle assembly;

a suture tensioner positioned on the control assembly and configured to receive the suture, maintaining a substantially constant tension on the suture during attachment of the retainer thereto; and

an energy source operably connected to the handle assembly for transmitting an energy to the retainer for attachment to the suture.

18. The surgical device according to claim 17, wherein the handle assembly including a handle portion and an end effector operably connected thereto, the end effector having a tip portion for transmitting the energy to the retainer.

19. The surgical device according to claim 18, wherein the controller assembly including a controller and a tubular section having an end portion configured for receiving the retainer therein, wherein the retainer is positioned between the tip portion of the end effector and the end portion of the tubular section.

20. The surgical device according to claim 19, wherein the handle assembly is slidably positionable through the controller assembly positioning the end effector through the tubular section, wherein the tubular section is in movable relation with the end effector from the first position to the second position.

21. The surgical device according to claim 20, wherein the tip portion of the end effector comprises a protrusion configured for capturing a first portion of the retainer.

22. The surgical device according to claim 21, wherein the end portion of the tubular section is configured to capture a second section of the retainer, such that the second section of the retainer is separated from the first section of the retainer when the tubular section is moved from the first position to the second position.

23. The surgical device according to claim 19, wherein the controller comprises a latch assembly for removable attaching the controller to the handle.

24. The surgical device according to claim 23, wherein the controller comprises a tension lever, including a bias member, in operative engagement with the tubular section, wherein actuation of the tension lever moves the tubular section from the first position to the second position.

25. The surgical device according to claim 24, wherein the bias member biases the tubular section into the first position.

26. The surgical device according to claim 25, wherein the bias member imparts a compressive force of between about 1 lb. and 20 lbs. on the retainer.

27. The surgical device of claim 19, wherein the suture tensioner is positioned on the tubular section.

28. The surgical device according to claim 27, wherein the suture tensioner comprising a bias member.

29. The surgical device according to claim 28, wherein the bias member imparts a tension of between about 2 lbs. to 10lbs. on the suture.

30. The surgical device according to claim 17, wherein the energy source is an external energy source.

31. The surgical device according to claim 17, wherein the energy source is an internal energy source disposed within a handle portion of the first member.

32. The surgical device according to claim 31, wherein the internal energy source is a rechargeable battery.

33. The surgical device according to claim 17, wherein the energy provided by the energy source is selected from the group consisting of radio frequency (RF) energy, laser energy, microwave energy, ultrasound energy, contact heating energy, and combinations thereof.

34. The surgical device according to claim 33, wherein the first member is configured to transmit at least two different types of energy from the energy source to the first compressive element.

35. An surgical device for attaching a retainer to a suture for securing tissue in a patient's body, comprising:

 a controller assembly including a controller and a tubular section having an end portion configured for receiving the retainer;

 a handle assembly including a handle portion and an end effector operably connected thereto, the end effector having a tip portion and being slidably positionable through the tubular section, such that the retainer is positionable between the tip portion of the end effector and the end portion of the tubular section with a compressive force being applied to the retainer;

 a suture tensioner positioned on the tubular section and configured to receive the suture, maintaining a substantially constant tension on the suture during attachment of the retainer thereto; and

 an energy source operably connected to the handle assembly for transmitting an energy to the retainer for attachment to the suture.